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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,202	02/24/2004	Makoto Muramatsu	249226US3	9262

22850 7590 02/06/2007
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

LAMB, BRENDA A

ART UNIT	PAPER NUMBER
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1734

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/784,202

Applicant(s)

MURAMATSU ET AL.

Examiner

Brenda A. Lamb

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/16/06 & 10/24/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-9,12-16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12,14-16 and 18-21 is/are allowed.
- 6) ☒ Claim(s) 1-5,7-9 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/16/2006 has been entered.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 2001-038272 in view of Tateyama et al and Stash et al 6,001,425.

Japan '272 teaches the design of a coating apparatus comprising a substantially tubular nozzle 134 provided with a discharge port 133 for discharging a process liquid, a

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nozzle holder which includes attachment components 135 provided with a through-hole into which the nozzle can be inserted, and a free space formed between an inner circumferential surface of the nozzle holder and an outer circumferential surface of the nozzle, at least a prescribed cleaning liquid being supplied into the free space, such that the process liquid is discharged from the discharge port of the nozzle under the state that the discharge port of the nozzle protrudes downward from the through-hole, and the nozzle is cleaned with a cleaning liquid under the state that the nozzle is housed in the nozzle holder. Japan '272 teaches a process liquid supply mechanism for supplying the process liquid into the nozzle which includes the supply tank for the coating liquid and a cleaning liquid supply mechanism for supplying a prescribed cleaning liquid into the free space for cleaning the nozzle which includes a supply tank for the cleaning liquid. Japan '272 fails to teach the nozzle holder is substantially bowl-shaped. However, it would have been obvious matter of design to provide the Japan '272 nozzle holder with a substantially bowl shape since such a modification would have involved a mere shape of a component (see *In re Dailey*, 149 USPQ 47). Further, Japan '272 fails to teach a means for relatively moving the nozzle holder and the nozzle in a vertical direction and fails to teach a gas supply mechanism for supplying a gas into the free space. However, it would have been obvious to modify the Japan '272 coating apparatus by substituting its support arm with another support arm movable in XYZ directions such as shown by Tateyama et al which includes movement in the vertical direction relative to another component of the system such the substrate or wafer for the obvious advantage of greater control of the process. Further, it would have been obvious given the

modifications of the Japan '272 coating apparatus as discussed above to substitute its cleaning supply pumping means with another pumping means which includes a gas supply mechanism for supplying a pressurized gas into the cleaning supply tank such that both the liquid and the gas are transferred into the free space since Stash et al teaches transferring a fluid from one container to another by flowing a pressurized gas from a gas supply mechanism into one of the container for the obvious reason to expect similar end results –fluid transferred from one container to the other.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 and 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-5 and 7-9 are confusing since applicant in the preamble of the recited claims has claimed a process liquid supply nozzle yet in the body of the claim applicant has claimed elements in addition to the nozzle. It is suggested that applicant at line 1 of claims 1-5 and 7-9 after “process liquid supply” delete “nozzle” and insert -- device --.

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.


Claims 1-5 and 7-9 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 12,14-16 and 18-21 are allowed.

Any inquiry concerning this communication should be directed to Brenda A. Lamb at telephone number (571) 272-1231. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday with alternate Wednesdays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla, can be reached on (571) 272 -1231. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Brenda A Lamb
Examiner
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